WHAT IS CLAIMED IS:

1. An optical recording medium, comprising:

lands and grooves,

said optical recording medium at least being reproducible by either of i) a first optical pickup device provided with a light source for emitting a light beam having a first wavelength $\lambda 1$, and a photodetector having a receiving light sensitivity *s1* with respect to the first wavelength $\lambda 1$, and ii) a second optical pickup device provided with a light source for emitting a light beam having a second wavelength $\lambda 2$ which is shorter than the first wavelength $\lambda 1$, and a photodetector having a receiving light sensitivity *s2* with respect to the second wavelength $\lambda 2$, which is lower than the receiving light sensitivity *s1*,

wherein said grooves are formed in such depth that both of a signal outputted from said photodetector of said first optical pickup device and a signal outputted from said photodetector of said second optical pickup device have not less than a predetermined level.

2. The optical recording medium as set forth in claim 1, wherein:

said predetermined level is within a range of from 0. 5 to 0.55 times of a maximum level of the signal

outputted from said photodetector of said first optical pickup device.

3. The optical recording medium as set forth in claim 1, satisfying the condition of:

$s2/s1 \geq 0.73$.

4. The optical recording medium as set forth in claim 1, satisfying the condition of:

$s2/s1 \geq 0.57$.

5. The optical recording medium as set forth in claim 1, wherein:

information can be recorded on both said lands and grooves.

6. The optical recording medium as set forth in claim 1, wherein:

said lands and grooves are formed in virtually same width.

7. The optical recording medium as set forth in claim 1, wherein:

said grooves are formed in width within a range of from 0. 5 μm to 0. 6 μm.

8. The optical recording medium as set forth in claim 1, wherein:

said lands are formed in width within a range of from 0. 5 μm to 0. 6 μm.

9. The optical recording medium as set forth in claim 6, wherein:

an interval between centers of adjacent grooves is not less than 1.95 times of a beam spot diameter of the light beam having the second wavelength $\lambda 2$.

10. The optical recording medium as set forth in claim 1 being a super-resolution magnetic medium.

11. An optical recording medium, comprising:

lands and grooves,

said optical recording medium at least being reproducible by either of i) a light beam having a first wavelength $\lambda 1$, and ii) a light beam having a second wavelength $\lambda 2$ which is shorter than the first wavelength $\lambda 1$,

wherein said groove depth d satisfies the conditions of:

$\lambda 1/n1 \times (3/64) \leq d \leq \lambda 1/n1 \times (13/64)$; and

$\lambda 2/n2 \times (4/64) \leq d \leq \lambda 2/n2 \times (12/64)$,

wherein $n1$ and $n2$ indicate refractive indexes of

said optical recording medium for the first wavelength $\lambda 1$ and the second wavelength $\lambda 2$ respectively.

12. The optical recording medium as set forth in claim 11, wherein:

the first wavelength $\lambda 1$ is set within a range of from 630 nm to 680 nm.

13. The optical recording medium as set forth in claim 11, wherein:

the second wavelength $\lambda 2$ is set within a range of from 390 nm to 430 nm.

14. The optical recording medium as set forth in claim 11, wherein:

said groove depth d satisfies the conditions of:

$\lambda 1/n1 \times (3/64) \leq d \leq \lambda 1/n1 \times (13/64)$; and

$\lambda 2/n2 \times (6/64) \leq d \leq \lambda 2/n2 \times (10/64)$.

15. The optical recording medium as set forth in claim 11, wherein:

information can be recorded on both said lands and grooves.

16. The optical recording medium as set forth in claim 11, wherein:

said lands and grooves are formed in virtually same width.

17. The optical recording medium as set forth in claim 16, wherein:

an interval between centers of adjacent grooves is not less than 1.95 times of a beam spot diameter of the light beam having the second wavelength $\lambda 2$.

18. The optical recording medium as set forth in claim 11 being a super-resolution magnetic medium.

19. An optical recording medium, comprising:

lands and grooves,

said optical recording medium at least being reproducible by either of i) a light beam having a first wavelength $\lambda 1$, and ii) a light beam having a second wavelength $\lambda 2$ which is shorter than the first wavelength $\lambda 1$,

wherein said grooves are formed in width within a range of from 0. 5 μm to 0. 6 μm, and in depth d within a range of from 19.4 nm to 47.5 nm.

20. The optical recording medium as set forth in claim 19, wherein:

said grooves are formed in depth d within a range

of from 19.4 nm to 45 nm.

21. The optical recording medium as set forth in claim 19, wherein:

said grooves are formed in depth *d* within a range of from 23.7 nm to 39.5 nm.

22. The optical recording medium as set forth in claim 19, wherein:

the first wavelength $\lambda 1$ is set within a range of from 630 nm to 680 nm.

23. The optical recording medium as set forth in claim 19, wherein:

the second wavelength $\lambda 2$ is set within a range of from 390 nm to 430 nm.

24. The optical recording medium as set forth in claim 19, wherein:

information can be recorded on both said lands and grooves.

25. The optical recording medium as set forth in claim 19, wherein:

said lands and grooves are formed in virtually same width.

26. The optical recording medium as set forth in claim 25, wherein:

an interval between centers of adjacent grooves is not less than 1.95 times of a beam spot diameter of the light beam having the second wavelength $\lambda 2$.

27. The optical recording medium as set forth in claim 19 being a super-resolution magnetic medium.

28. An optical recording medium, comprising:

lands and grooves,

said optical recording medium at least being reproducible by either of i) a light beam having a first wavelength $\lambda 1$, and ii) a light beam having a second wavelength $\lambda 2$ which is shorter than the first wavelength $\lambda 1$,

wherein said groove depth d satisfies the condition of:

$$\lambda 1/n1 \times (3/64) \leq d \leq \lambda 1/n1 \times (13/64),$$

wherein $n1$ indicates a refractive index of said optical recording medium for the first wavelength $\lambda 1$, and

a reflective index $r1$ of said optical recording medium with respect to the first wavelength $\lambda 1$ is smaller than a reflective index $r2$ with respect to the second wavelength $\lambda 2$.

29. The optical recording medium as set forth in claim 28, wherein:

the first wavelength λ1 is set within a range of from 630 nm to 680 nm.

30. The optical recording medium as set forth in claim 28, wherein:

the second wavelength λ2 is set within a range of from 390 nm to 430 nm.

31. The optical recording medium as set forth in claim 28, wherein:

information can be recorded on both said lands and groove.

32. The optical recording medium as set forth in claim 28, wherein:

said lands and grooves are formed in virtually same width.

33. The optical recording medium as set forth in claim 32, wherein:

an interval between centers of adjacent grooves is not less than 1.95 times of a beam spot diameter of the light beam having the second wavelength λ2.

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34. The optical recording medium as set forth in claim 28 being a super-resolution magnetic medium.

35. An optical recording medium, comprising:

lands and grooves,

said optical recording medium at least being reproducible by either of i) a light beam having a first wavelength $\lambda 1$, and ii) a light beam having a second wavelength $\lambda 2$ which is shorter than the first wavelength $\lambda 1$,

wherein said groove depth d satisfies the condition of:

$\lambda 1/n1 \times (3/64) \leq d \leq \lambda 1/n1 \times (13/64)$,

wherein $n1$ indicates a refractive index of said optical recording medium for the first wavelength $\lambda 1$, and

a reproducing power $p1$ of said optical recording medium set for the first wavelength $\lambda 1$ is lower than a reproducing power $p2$ set for the second wavelength $\lambda 2$.

36. The optical recording medium as set forth in claim 35, wherein:

the first wavelength $\lambda 1$ is set within a range of from 630 nm to 680 nm.

37. The optical recording medium as set forth in

claim 35, wherein:

the second wavelength $\lambda 2$ is set within a range of from 390 nm to 430 nm.

38. The optical recording medium as set forth in claim 35, wherein:

information can be recorded on both said lands and grooves.

39. The optical recording medium as set forth in claim 35, wherein:

said lands and grooves are formed in virtually same width.

40. The optical recording medium as set forth in claim 39, wherein:

an interval between centers of adjacent grooves is not less than 1.95 times of a beam spot diameter of the light beam having the second wavelength $\lambda 2$.

41. The optical recording medium as set forth in claim 35 being a super-resolution magnetic medium.

42. An optical recording medium, comprising:

lands and grooves,

said optical recording medium at least being

reproducible by either of i) a light beam having a first wavelength $\lambda 1$, and ii) a second beam having a second wavelength $\lambda 2$ which is shorter than the first wavelength $\lambda 1$,

wherein said groove depth *d* satisfies the condition of:

$\lambda 1/n1 \times (3/64) \leq d \leq \lambda 1/n1 \times (13/64)$,

wherein *n1* indicates a refractive index of said optical recording medium for the first wavelength $\lambda 1$, and

a reflective index *r1* of said optical recording medium with respect to the first wavelength $\lambda 1$ and a reflective index *r2* with respect to the second wavelength $\lambda 2$ satisfy the condition of:

$r2 \times p2 > r1 \times p1$,

wherein *p1* is a reproducing power of said optical recording medium set for the first wavelength $\lambda 1$ and *p2* is a reproducing power set for the second wavelength $\lambda 2$.

43. The optical recording medium as set forth in claim 42, wherein:

the first wavelength $\lambda 1$ is set within a range of from 630 nm to 680 nm.

44. The optical recording medium as set forth in

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claim 42, wherein:

the second wavelength λ2 is set within a range of from 390 nm to 430 nm.

45. The optical recording medium as set forth in claim 42, wherein:

information can be recorded on both said lands and grooves.

46. The optical recording medium as set forth in claim 42, wherein:

said lands and grooves are formed in virtually same width.

47. The optical recording medium as set forth in claim 46, wherein:

an interval between centers of adjacent grooves is not less than 1.95 times of a beam spot diameter of the light beam having the second wavelength λ2.

48. The optical recording medium as set forth in claim 42 being a super-resolution magnetic medium.

49. An optical pickup device for recording and reproducing information with respect to the optical recording medium of claim 11, comprising:

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a light source for emitting the light beam having the second wavelength $\lambda 2$, and

a photodetector for receiving light reflected from said optical recording medium,

wherein said photodetector has a receiving light sensitivity *s2* with respect to the second wavelength $\lambda 2$ satisfying the condition of:

$s2/s1 \geq 0.73$,

wherein *s1* is a receiving light sensitivity of said photodetector with respect to the first wavelength $\lambda 1$.

50. An optical pickup device for recording and reproducing information with respect to the optical recording medium of claim 14, comprising:

a light source for emitting the light beam having the second wavelength $\lambda 2$, and

a photodetector for receiving light reflected from said optical recording medium,

wherein said photodetector has a receiving light sensitivity *s2* with respect to the second wavelength $\lambda 2$ satisfying the condition of:

$s2/s1 \geq 0.57$,

wherein *s1* is a receiving light sensitivity of said photodetector with respect to the first wavelength $\lambda 1$.

51. An optical pickup device for recording and reproducing information with respect to the optical recording medium of claim 19, comprising:

a light source for emitting the light beam having the second wavelength $\lambda 2$, and

a photodetector for receiving light reflected from said optical recording medium,

wherein said photodetector has a receiving light sensitivity *s2* with respect to the second wavelength $\lambda 2$ satisfying the condition of:

$s2/s1 \geq 0.73$,

wherein *s1* is a receiving light sensitivity of said photodetector with respect to the first wavelength $\lambda 1$.

52. An optical pickup device for recording and reproducing information with respect to the optical recording medium of claim 21, comprising:

a light source for emitting the light beam having the second wavelength $\lambda 2$, and

a photodetector for receiving light reflected from said optical recording medium,

wherein said photodetector has a receiving light sensitivity *s2* with respect to the second wavelength $\lambda 2$ satisfying the condition of:

$s2/s1 \geq 0.57$,

wherein *s1* is a receiving light sensitivity of said photodetector with respect to the first wavelength $\lambda 1$.

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